

Field Engineering and Technology**Review of *Electricity Supply* unit standards**

| Subfield | Domain | ID |
|--------------------|---|--|
| Electricity Supply | Electricity Supply - Design and Commissioning | 14297 |
| | Electricity Supply - Testing | 14271-14276, 14280, 14282, 14284, 14285, 14287, 14288, 14291, 14294, 20191 |

The Electricity Supply Industry Training Organisation (ESITO) has completed the review of the unit standards listed above.

Date new versions published

December 2011

Planned review date

December 2015

Summary

These unit standards were reviewed to ensure that they remained relevant to the electricity supply industry. Industry representatives participated in the review and assessors were asked to feedback about unit standards against which they had assessed.

Two of the unit standards were designated as expiring because of low usage. One unit standard was designated as expiring because its outcomes duplicated those of another registered unit standard.

The format and terminology of the reviewed unit standards were updated to reflect the introduction of the *Quality assurance criteria for the listing of unit standards on the Directory of Assessment Standards* in August 2010. The changes to terminology are:

- special notes have become explanatory notes
- elements have become outcome statements
- performance criteria have become evidence requirements.

The reviewed unit standards also include last dates for the assessment of previous versions of the unit standards.

Main changes

- Unit standard 14280 was expired because of duplication with unit standard 14297.
- Unit standards 14282 and 14284 were designated as expiring because of low usage.
- Unit standard 14297 moved from the Electricity Supply - Design and Commissioning domain to the Electricity Supply - Testing domain.
- The titles of unit standards 14271, 14273, 14274, 14275, 14276, 14285, 14291, and 14297 were updated.
- Outcome statements, range statements, and purpose statements were updated.

Category D unit standards will expire at the end of December 2013

Impact on registered qualifications

| Key to type of impact | |
|--------------------------------|--|
| Affected | The qualification lists a reviewed classification (domain or subfield) in an elective set The qualification lists a standard that has changes to level or credits The qualification lists a C or D category standard |
| Not materially affected | The qualification lists a standard that has a new title The qualification lists a standard that has a new classification |

The following Electricity Supply Industry Training Organisation qualifications are impacted by the outcomes of this review and will be updated when they are reviewed in 2012. The unit standards that generated the status *Affected* are listed in **bold**.

| Ref | Qualification Title | ID |
|------|--|-----------------------------|
| 1260 | National Certificate in Electricity Supply (Power Technician) (Level 5) with an optional strand in Generation and Sustainable Energy | 14280 , 14285, 14297 |
| 1294 | National Certificate in Electricity Supply (Electrical) (Level 3) with strands in Electricity Supply Electrician, Electrical Fitter, and Electrical Technician | 14285 |
| 1295 | National Certificate in Electricity Supply (Electrical) (Level 4) with strands in Electricity Supply Electrician, Electrical Fitter, and Electrical Technician | 14280 |
| 1389 | National Certificate in Electricity Supply (Line Mechanic Transmission) (Level 4) with optional strands in Optional Work Skills (E1 (O)), and Optional De-energised Work Skills (E3) | 14284 |

Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

| Key to review category | |
|------------------------|---|
| A | Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number |
| B | Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number |
| C | Major changes that necessitate the registration of a replacement standard with a new ID |
| D | Standard will expire and not be replaced |

Engineering and Technology > Electricity Supply > Electricity Supply - Testing

| ID | Title | Level | Credit | Review Category |
|-------|---|-------|--------|-----------------|
| 14271 | Carry out tests on power transformers Carry out acceptance, commissioning and maintenance tests on power transformers | 4 | 6 | B |
| 14272 | Carry out maintenance and/or acceptance tests on high voltage circuit breakers | 4 | 6 | B |
| 14273 | Carry out tests on instrument transformers Carry out maintenance and commissioning tests on instrument transformers | 4 | 5 | B |

| ID | Title | Level | Credit | Review Category |
|-------|--|-------|--------|-----------------|
| 14274 | Carry out electrical tests on other high voltage bus connected equipment Carry out electrical tests on high voltage bus connected equipment | 3 | 4 | B |
| 14275 | Carry out tests on earth mat (grid) and equipment bonding systems Carry out maintenance and/or commissioning tests on an earthing mat and equipment bonding system | 3 | 3 | B |
| 14276 | Carry out tests on high voltage power cables Carry out maintenance and/or commissioning tests on high voltage power cables and terminations | 3 | 4 | B |
| 14280 | Carry out acceptance and maintenance tests on single input protection relays | 4 | 4 | D |
| 14282 | Carry out repairs and tests on protection relays | 4 | 5 | D |
| 14284 | Carry out soil resistivity tests for high voltage earth system | 3 | 5 | D |
| 14285 | Carry out tests on ancillary service (AC and DC) and uninterrupted power supply supplies Carry out tests on uninterrupted power supply supplies | 3 | 4 | B |
| 14287 | Use and maintain test instruments used within the high voltage electrical industry | 3 | 4 | B |
| 14288 | Carry out tests on battery banks and charge systems | 3 | 4 | B |
| 14291 | Repair, maintain, and test a SCADA system Test and repair a SCADA system | 5 | 6 | B |
| 14294 | Carry out insulating oil sampling and voltage breakdown tests | 3 | 3 | B |
| 20191 | Conduct advanced insulation resistance testing in the electricity supply industry | 4 | 5 | B |

Engineering and Technology > Electricity Supply

| ID | Domain | Title | Level | Credit | Review Category |
|-------|--|--|-------|--------|-----------------|
| 14297 | Electricity Supply - Design and Commissioning Electricity Supply - Testing | Carry out tests on multiple input protection systems Carry out commissioning and maintenance tests on single and multiple input protection systems | 5 | 6 | B |